

Title (en)

CRYSTALLINE SYNTHETIC INTERMEDIATE USEFUL IN PROCESSES FOR MAKING A MDM2 INHIBITOR

Title (de)

KRISTALLINES ZWISCHENPRODUKT ZUR VERWENDUNG IN VERFAHREN ZUR HERSTELLUNG EINES MDM2-INHIBITORS

Title (fr)

INTERMÉDIAIRE DE SYNTHÈSE CRISTALLIN UTILE DANS DES PROCÉDÉS DE FABRICATION D'UN INHIBITEUR DE MDM2

Publication

EP 3805232 A1 20210414 (EN)

Application

EP 20197741 A 20140609

Priority

- US 201361833196 P 20130610
- EP 14735785 A 20140609
- US 2014041594 W 20140609

Abstract (en)

The present invention provides the crystalline form of an intermediate useful in processes for making 2-((3R,5R,6S)-5-(3-chlorophenyl)-6-(4-chlorophenyl)-1-((S)-1-(isopropylsulfonyl)-3-methylbutan-2-yl)-3-methyl-2-oxopiperidin-3-yl)acetic acid as well as processes for making the intermediate.

IPC 8 full level

C07D 498/04 (2006.01); **C07C 309/35** (2006.01)

CPC (source: EA EP IL KR US)

A61K 31/45 (2013.01 - EA IL); **A61K 31/451** (2013.01 - IL KR US); **A61P 35/00** (2018.01 - EA IL KR); **A61P 35/02** (2018.01 - IL);
A61P 43/00 (2018.01 - IL); **C07C 309/04** (2013.01 - EA IL US); **C07C 309/25** (2013.01 - IL US); **C07C 309/35** (2013.01 - EP IL US);
C07C 313/02 (2013.01 - IL US); **C07D 211/76** (2013.01 - EA IL KR US); **C07D 211/94** (2013.01 - IL US); **C07D 491/048** (2013.01 - IL US);
C07D 498/04 (2013.01 - EA EP IL US); **C07B 2200/13** (2013.01 - IL KR US)

Citation (applicant)

- WO 2011153509 A1 20111208 - AMGEN INC [US], et al
- WO 2010151791 A1 20101229 - AMGEN INC [US]
- WO 2010151737 A2 20101229 - AMGEN INC [US], et al
- WO 2010151735 A2 20101229 - AMGEN INC [US], et al
- WO 2010151740 A2 20101229 - AMGEN INC [US]
- WO 2008118455 A1 20081002 - AMGEN INC [US]
- WO 2008118454 A2 20081002 - AMGEN INC [US]
- WO 2008118468 A1 20081002 - AMGEN INC [US]
- US 2010331293 A1 20101230 - CUSHING TIMOTHY D [US], et al
- US 2010331306 A1 20101230 - BUI MINNA [US], et al
- US 2009023761 A1 20090122 - CHEN YI [US], et al
- US 2009030002 A1 20090129 - CHEN YI [US], et al
- US 2009137581 A1 20090528 - CHEN YI [US], et al
- US 2009054405 A1 20090226 - BOOKER SHON [US], et al
- US 2009163489 A1 20090625 - BOOKER SHON [US], et al
- US 2010273764 A1 20101028 - ANDREWS KRISTIN [US], et al
- US 2011092504 A1 20110421 - BO YUNXIN Y [US], et al
- WO 2010108074 A2 20100923 - AMGEN INC [US], et al
- WO 2010132598 A1 20101118 - AMGEN INC [US], et al
- WO 2010096314 A1 20100826 - AMGEN INC [US], et al
- US 7354944 B2 20080408 - ZENG QINGPING [US], et al
- US 7700636 B2 20100420 - MONENSCHEIN HOLGER [US], et al
- US 7919514 B2 20110405 - MONENSCHEIN HOLGER [US], et al
- US 7514566 B2 20090407 - ZENG QINGPING [US], et al
- US 2009270445 A1 20091029 - ZENG QINGPING [US], et al
- US 7919504 B2 20110405 - ZENG QINGPING [US], et al
- US 7897619 B2 20110301 - ZENG QINGPING [US], et al
- WO 2010083246 A1 20100722 - AMGEN INC [US], et al
- "GenBank", Database accession no. NM_058195 9
- S. M. BERGE ET AL.: "Pharmaceutical Salts", J PHARM SCI, vol. 66, 1977, pages 1 - 19, XP002675560, DOI: 10.1002/jps.2600660104
- T. HIGUCHI. STELLA: "Prodrugs as Novel Delivery Systems", A.C.S. SYMPOSIUM SERIES, vol. 14
- "Bioreversible Carriers in Drug Design", 1987, AMERICAN PHARMACEUTICAL ASSOCIATION AND PERGAMON PRESS

Citation (search report)

[ID] WO 2011153509 A1 20111208 - AMGEN INC [US], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

US 2014364455 A1 20141211; US 9376386 B2 20160628; AP 2015008891 A0 20151130; AR 096582 A1 20160120; AR 119727 A2 20220105;
AU 2014278428 A1 20151126; AU 2014278428 B2 20181115; AU 2018260844 A1 20181122; AU 2018260844 B2 20200813;
AU 2020267169 A1 20201203; AU 2020267169 B2 20220825; AU 2022271425 A1 20221222; AU 2022271425 B2 20240613;
BR 112015031004 A2 20200512; BR 112015031004 B1 20220920; BR 122020003153 B1 20220927; CA 2914723 A1 20141218;
CA 2914723 C 20210615; CA 3115609 A1 20141218; CA 3115609 C 20230808; CA 3200532 A1 20141218; CA 3201958 A1 20141218;
CL 2015003589 A1 20160617; CL 2019000056 A1 20190503; CL 2021000566 A1 20210903; CN 105358530 A 20160224;

CN 110003092 A 20190712; CN 110627708 A 20191231; CR 20160010 A 20160204; CR 20210290 A 20210723; CY 1123661 T1 20220324; DK 3008039 T3 20210104; EA 031254 B1 20181228; EA 201592305 A1 20160531; EA 201891642 A1 20190830; EA 202091612 A1 20201005; EP 3008039 A1 20160420; EP 3008039 B1 20201111; EP 3805232 A1 20210414; ES 2851023 T3 20210902; HR P20202065 T1 20210219; HU E053047 T2 20210628; IL 242622 A0 20160201; IL 242622 B 20190630; IL 266504 A 20190731; IL 266504 B 20210429; IL 281807 A 20210531; IL 281807 B 20221201; IL 281807 B2 20230401; IL 297860 A 20230101; JO 3768 B1 20210131; JO P20200296 A1 20170616; JP 2016528179 A 20160915; JP 2020147573 A 20200917; JP 2021130685 A 20210909; JP 2023089126 A 20230627; JP 6891322 B2 20210618; JP 6998655 B2 20220204; JP 7263439 B2 20230424; KR 20160018576 A 20160217; KR 20210121270 A 20211007; KR 20230019216 A 20230207; LT 3008039 T 20210125; MA 38714 A1 20171031; MA 43288 A1 20200430; MA 43288 B1 20201028; MA 53572 A1 20211029; MX 2015016856 A 20160407; MX 2019012007 A 20191111; MY 194848 A 20221219; NZ 714821 A 20201030; NZ 753956 A 20201218; PE 20160113 A1 20160303; PE 20210153 A1 20210126; PH 12015502705 A1 20160314; PH 12015502705 B1 20160314; PL 3008039 T3 20210419; PT 3008039 T 20210113; RS 61192 B1 20210129; SG 10201801402X A 20180427; SG 11201509896V A 20160128; SI 3008039 T1 20210331; TN 2015000521 A1 20170406; TW 201536743 A 20151001; TW 201922705 A 20190616; TW 202035370 A 20201001; TW I649306 B 20190201; TW I698428 B 20200711; TW I791153 B 20230201; UA 121301 C2 20200512; US 2016264526 A1 20160915; US 2016287570 A1 20161006; US 2016289178 A1 20161006; US 2016289190 A1 20161006; US 2016289243 A1 20161006; US 2018092898 A1 20180405; US 2020281912 A1 20200910; US 2022280496 A1 20220908; US 202301974 A1 20230928; US 9623018 B2 20170418; US 9757367 B2 20170912; US 9801867 B2 20171031; US 9855259 B2 20180102; UY 35605 A 20150130; WO 2014200937 A1 20141218

DOCDB simple family (application)

US 201414301087 A 20140610; AP 2015008891 A 20140609; AR P140102235 A 20140610; AR P200101191 A 20200428; AU 2014278428 A 20140609; AU 2018260844 A 20181107; AU 2020267169 A 20201110; AU 2022271425 A 20221116; BR 112015031004 A 20140609; BR 122020003153 A 20140609; CA 2914723 A 20140609; CA 3115609 A 20140609; CA 3200532 A 20140609; CA 3201958 A 20140609; CL 2015003589 A 20151210; CL 2019000056 A 20190108; CL 2021000566 A 20210308; CN 201480033215 A 20140609; CN 201811222652 A 20140609; CN 201910783352 A 20140609; CR 20160010 A 20160107; CR 20210290 A 20140609; CY 201101201 T 20201218; DK 14735785 T 20140609; EA 201592305 A 20140609; EA 201891642 A 20140609; EA 202091612 A 20140609; EP 14735785 A 20140609; EP 20197741 A 20140609; ES 14735785 T 20140609; HR P20202065 T 20201224; HU E14735785 A 20140609; IL 24262215 A 20151116; IL 26650419 A 20190507; IL 28180721 A 20210325; IL 29786022 A 20221102; JO P20140186 A 20140610; JO P20200296 A 20130610; JP 2016519576 A 20140609; JP 2020084989 A 20200514; JP 2021087378 A 20210525; JP 2023064715 A 20230412; KR 20157036194 A 20140609; KR 20217030265 A 20140609; KR 20237002549 A 20140609; LT 14735785 T 20140609; MA 38714 A 20140609; MA 43288 A 20151223; MA 53572 A 20140609; MX 2015016856 A 20140609; MX 2019012007 A 20151208; MY PI2015002896 A 20140609; NZ 71482114 A 20140609; NZ 75395614 A 20140609; PE 2015002561 A 20140609; PE 2020000392 A 20140609; PH 12015502705 A 20151203; PL 14735785 T 20140609; PT 14735785 T 20140609; RS P20201515 A 20140609; SG 10201801402X A 20140609; SG 11201509896V A 20140609; SI 201431735 T 20140609; TN 2015000521 A 20140609; TW 103120104 A 20140610; TW 107134691 A 20140610; TW 109118829 A 20140610; UA A201600159 A 20140609; US 2014041594 W 20140609; US 201615163186 A 20160524; US 201615175798 A 20160607; US 201615175805 A 20160607; US 201615175821 A 20160607; US 201615175824 A 20160607; US 201715820830 A 20171122; US 201916664103 A 20191025; US 202117500039 A 20211013; US 202318313428 A 20230508; UY 35605 A 20140610